

PROGRESS REPORT

GRANT NUMBER: 7310026

COLD CLIMATE HEAT PUMP DEMONSTRATION

COLD CLIMATE HOUSING RESEARCH CENTER

7/1/2014 – 9/30/2014

CCHRC Internet Web Site: http://www.cchrc.org
P.O. Box 82489, Fairbanks, AK 99708 Phone: (907)457-3454 Fax: (907)457-3456

Deliverables Submitted

No reports were submitted this quarter.

Budget

Amount Invoiced: \$437.58

Schedule Status

We are on schedule. The project switched over to the monitoring phase for year 2 in September 2014.

Percent Complete

| • | Start | | |
|--|--------|----------|------------------|
| | Date | End Date | Percent Complete |
| Thermal Response Test | Sep-12 | Oct-12 | 100% |
| Heat pump system design | Nov-12 | Mar-13 | 100% |
| Update monitoring plan | Nov-12 | Mar-13 | 100% |
| | | | |
| Ground loop installation | Jun-13 | Jul-13 | 100% |
| Heat pump installation | May-13 | Nov-13 | 100% |
| Data acquisition system installation | Jun-13 | Dec-13 | 100% |
| Commissioning | Sep-13 | Jan-14 | 100% |
| | | | |
| System monitoring and maintenance Year 1 | Sep-13 | Sep-14 | 100% |
| System monitoring and maintenance Year 2 | Sep-14 | Sep-15 | N/A |
| System monitoring and maintenance Year 3 | Sep-15 | Mar-16 | N/A |
| Data analysis, LCCA, and draft report completion | Apr-16 | Jun-16 | 10% |
| Final project report | Jul-16 | Jul-16 | N/A |

Work Progress

The heat pump and data collection system have been commissioned. The systems are running and will continue their operation with minimal management for 2 more years. The project has a website, http://www.cchrc.org/ground-source-heat-pump-demonstration-cchrc. CCHRC presented a paper on the development of the project at the ASHRAE annual conference in Seattle in June. The paper and presentation are included with this report.

Future Work

Monitoring the heat pump will involve occasional data verification over the next 2 and a half years. A maintenance log will also be kept in detail.